SCIENCE NEWS INDEX

Vol. 124, Nos. 1-27, July-December, 1983, pp. 1-432
Science Service, Washington, D.C. 20036

A

A. africanus 10, 291
AIDS 54, 302
Abraham, Henry David 104
Abraham, Sidney 103
Abrahamson, James A. ... 4, 165
Accelerators .. 71, 118, 190, 220
Accelerators, Heavy ion 134
Accretion disk 167
Acid precipitation 313
Acid rain 7, 72, 261
Acivicin 186
Ackerman, Thomas 315
Acquavella, J. F. 232
Acquired immune deficiency syndrome *See:* AIDS
Acree, Terry E. 186
Acrylic finish, Automobile .. 149
Adam, A. H. 251
Adams, Charles 119
Addison's disease 84
Adrastea 247
Agent Orange 145, 156, 195, 309
Aggression .. 113, 122, 148, 173
Agriculture 412
Air pollution 360
Aircraft 151
Airliner, Korean Air Lines 007 ..... 196, 393
Airport-landing lights 270
Albritten, Bill 187
Alcator C 311
Alcohol dependency 302
Alcoholism 44, 180
Aldan River, Siberia 6
Aldrich, Richard W. 390
Aleksandrov, Aleksandr 356
Aleksandrov, Vladimir V. 317, 407
Alfalfa, Hairy 117
Alguard, M. J. 374
Alkanes 166
Alldredge, Alice L. 23
Allen, John F 85
Allergic reaction, Heart 344
Allergy, Drugs 392
Alm, Alvin L. 406
Alpha-MSH 23
Alternating Gradient Synchrotron 134
Altman, Sidney 412
Aluminum 213
Alvarez, Luis 312
Alzheimer's disease 5, 213, 374, 389
Ambartsumyan, Viktor 187
American Physical Society .. 329
Ames, Bruce N. 217
Amnesia 378
Amoco Cadiz oil spill 29
Amyloid plaques 389
Anderson, W. French 372
Anemia, Iron-deficiency 281
Angara, Soviet 268
Angioplasty 213, 360
Animal cruelty 118
Animal Welfare Act 118
Animals, Learning experiments 394
Animals, Marine 229, 298
Anomalons 20, 39
Antarctic Convergence 416
Antarctic ice cycles 6, 67
Antarctic seismic station 280
Antarctica 280, 401, 416
Antelope horns 183
Antibodies, Monoclonal . 12, 136, 218, 357
Anxiety 45, 131
Apolipoprotein 341
Appleman, Evan H. 270
Apter, Dan 74
Arctic atmosphere 151
Arctic evolution 197
Arctic ice pack 328
Arctic landing lights 270
Ariane rocket 87
Arinella, Dennis 92
Armbruster, John 93
Arnett, Edward M. 108
Arnold, Ray 343
Arp, Halton "Chip" 254
Artery grafts 375
Artificial intelligence 150
Artvinli, Mustafa 155
Asa, Sylvia 44
Asbestos 155, 311
Asbestos-hazard pay 155
Aspartame 134
Aspirin desensitization 392
Association of American Universities 329
Asteroid crater 312, 398
Atherosclerosis 341
Atherosclerosis, Premature . 341
Athletes, Olympic 360
Atlas, Ronald M. 29
Atlas 247
Atmosphere, Lower 182
Atmospheric carbon dioxide 260
Auchter, Thorne 229
Aumann, Harmut H. 100
Aungst, Bruce J. 14
Aurora Borealis 196
Aviation navigation errors .. 196
Axel, Richard 133
Axelrod, Julius 84

B

BEPC 220
Bach, Zellig 398
Bachmann, Klaus J. 376
Backus, John 202
Bacteria, Cellulose-digesting 248
Bacteria, Ice-triggering 132, 198, 247
Bacteria, Magnetite-producing 308
Bacteria, Soil 280
Bacteria, Wastewater cleanup 234
Badawy, Omar E. 20
Bagusch, Helmut 102
Bailey, Roy 41
Baim, Donald 230
Baird, M. J. 85
Baldrige, Malcolm . 119, 247, 341
Balkwill, David 348
Ball, Leslie D. 294
Baltimore, David 117
Bamboo, Arrow 68
Bantle, John P. 38
Barbacid, Mariano 248
Barber, Richard 301
Barchus, Jack D. 380
Barclay, Leslie W. 279
Baris, Y. Izzettin 155
Barnard 5 324
Barnard's Star 116
Barratt-Brown, Elizabeth ... 7
Barton, Mark 134
Basic, True 404
Basov, Nikolai 187
Bateson, Patrick 396
Batteries, Swallowed 376
Baum, Michael J. 326
Bawden, James 389
Baylink, David J. 141
Becker, Diana M. 344
Becker, R. A. 261
Bedell, Douglas 183
Beere, Polly 360
Bees 154
Beggs, James M. 87, 199
Behavior, Animal 394
Behavior-diet connection 122, 125, 226
Behrendt, John 417
Beichman, Charles 100
Beijing Electron Positron Collider 220
Belle 236, 276
Belousov-Zhabotinskii reaction 180
Belts, Richard P. 59
Benedict, Chauncey 68
Benirschke, Kurt 266
Bennett, Joseph 425
Bennink, H. J. T. Coelingh ... 59
Benowitz, Neal L. 92
Benzo(a)pyrene 155
Benzodiazepines 45
Beran, Donald W. 155
Berg, Walter 151
Bergman, Robert G. 166
Berliner, Hans 237, 303
Berman, Barry L. 374
Berry, Joseph 314
Beutler, Ernest 249
Bharati, Saroja 344
Bienenstock, Arthur 228
Bifluoride ion 149
Biological clock 154
Biological reactor 313
Bioreactor 234
Biotechnology 119
Biotechnology industry 412
Bipedality 8
Bird song learning 394
Birds, Pacific 298
Birks, John 315
Birth defects test 116
Bishop, William 247
Black, Roger 104
Black holes 19, 407
Blackburn, Henry 133
Blackmun, Harry A. 38
Blakemore, Richard 308
Blanch, Harvey W. 235
Bland, Roger 39
Blass, Elliot M. 136
Blayney, Douglas W. 149
Blood, Artificial 360
Blood cells, Red 344
Blood chemiluminescence .. 281
Blood clotting factor 372
Blood clots 413
Blood pressure, High *See:* Hypertension
Blood vessels 168, 213
Bloom, Floyd E. 212
Bluford, Guion S. 165
Boatner, Lynn A. 105
Boaz, Noel 3
Bogal-Albritten, Rosemarie . 187
Bogan, James 181
Boggess, Nancy 324
Bogolyubov, Nikolai 187
Bograd, Michele 187
Boksenberg, Alec 253
Boltzmann machine 150
Bonaventura, Celia 405
Bonaventura, Joe 405
Bone disease 140
Bone loss, Alcoholics 44
Bond, Howard E. 37
Bond, Victor 331
Borysenko, Joan Z. 7
Botvinnik, Mikhail 303
Boudjouk, Philip 186
Bowers, Kenneth 248
Brain, Dopamine pathways .. 196
Brain damage, Fetal 164
Brain/Evolution 101
Brain genes 212
Brain/Memory and learning 369, 378
Brain/Mental retardation ... 154
Brain opiate system 359
Brandenstein, Daniel 165
Brandin, David H. 294
Brandt, Edward N. Jr. 55
Breast cancer therapy 376
Breeder reactor ... 52, 126, 329
Breggin, Peter 214, 323
Breier, Alan 248
Brenner, Sydney 232
Briggs, Geoffrey 87
Briggs, Richard J. 181
Brodie, Herbert 74
Bromine gas 151
Bronstein, Phyllis, ... 172
Brooke, James A. 61
Brooks, Jack 292
Brown, Herbert C. 107, 259
Brown, R. Hamilton 36
Brownstein, Alan 372
Brucato, Robert 58
Buckley, Joseph P. 292
Bueche Award 311
Buescher, Ronald 93
Bulkley, Bernadine Healy ... 295
Bull, Richard 103
Bumpers, Dale 261
Burger, Robert M. 358
Burn diagnosis 230
Burns, Joseph H. 295
Bush, Mitchell 405
Buster, John E. 69
Bypass surgery 294
Byrd, Robert 359

C

CBLI 357
CRF 84
Cadmium 122
Caffeine 344
Cahill, Daniel F. 70
Calame, Kathryn 117
Calandra, Joseph 276
Calcitriol 373
Calcium 103, 226
Caldwell, Martyn 86
California coast 392
Calloway, C. Bradford 248
Cambrian-Precambrian boundary 6
Campbell, Donald 277
Campbell, Murray 237
Campylobacter jejuni 105
Cancer
Brain 302
Breast 74, 279, 376
Cervical 279
Compensation Act 330
Computer-aided treatment 193, 204
Esophageal 88
Eye 193, 204
Foods 217
Formation 154
Liver 127
Lung 248
Prostate 92
Radiation exposure 127
Risk 69
Skin 232
Spinal 204
Treatment 193, 204, 216
Virus 149
Cantrell, John H. Jr. 230
Canuto, Vittorio M. 346
Carbon, John A. 12
Carbon-carbon bonds 166
Carbon dioxide, Atmospheric 166, 260
Carpenter, Barry K. 109
Carpenter, Charles B. ... 219, 357
Casey, Daniel E. 214
Caskey, C. Thomas 90
Castelli, Benedetto 347, 387
Castro, Joseh R. 204
Cataract-removal costs 215
Catholic University of America 52
Cats 75
Cavalli-Sforza, Luigi L. 101
Cell division 12
Cellulose-digesting bacteria . 248
Center for Advanced Materials 345
Centrella, Joan 284, 285
Cerebellum 380
Cerklewski, Florian 281
Chalk, Rosemary 329
Chandrasekhar, Subrahmanyan 278
Chang, Shih-Bin 308
Channeling radiation 374
Channing, Cornelia P. 92
Chaos, Mathematics of 65, 76
Chapman, Clark 87
Char, Devron 204
Charlton, Valery 267
Charron, Laura 21
Chase, Thomas N. 374, 409
Chatterjee, Sankar 357
Cheese making 55
Chemical companies 93
Chemical reactions 168, 186
Chemical-separating scheme 4
Chemical waves 180
Chemiluminescence, Blood . 281
Chemtob, Claude M. 164
Cherry, John P. 28
Chess, Computer 225, 236, 276, 303
Chess, Computers versus humans 225, 236
Chestnut, Charles III 373
Chien, Chia-Ling 85
Children, Deaf 73
Chlorinated water 103
Chlorine 226
Chocolate 262
Choi, Duck K. 197
Cholesterol 281
Cholesterol-lowering diet .. 263
Cholestyramine 341
Choline chloride 249
Chorionic villi sampling 116
Choroidal melanomas .. 193, 204
Chow Man-yu 220
Christensen, A. Sherman ... 377
Christian, John J. 249
Christiansen, Robert 327
Chromosome fragile sites 69
Chromosomes 12
Chromosomes, Artificial 248
Chrousos, George P. 84
Chu, Steven 281
Cicerone, Ralph 182
Cigarette smoking 343, 360
Cigarettes, 'Low-nicotine' .. 92
Ciguatoxin 166
Citrus peel oil 231, 323
Clark, Roger N. 36
Clark, William P. 261
Claussen, M. J. 407
Clavicle, Sahabi 3
Clay, Don 119
Cleft palate 359
Clement, Jean Luc 412
Climate, El Niño's effect 298
Climate, Greenhouse effect . 260
Climate Forecast Center ... 155
Clinch River Breeder Reactor 52, 126, 329
Clocks, Gravitational 346
Cloud, Preston 6
Clouds, Hydrogen 253
Clyde, Robert A. 234, 275
Coal 93, 133, 177, 189
Coal gasification project 329, 393
Cobalt 122
Cocoa butter crystals 262
Codeine 126
Cohen, Jack S. 251
Cohen, William 375
Cola 14
Coleman, William T. 183
Collagen 232
Collagen denaturation 230
College students 187
Collen, Déseré 340
Colliding beam machines ... 220
Colligan, Robert C. 228
Collins, John A. 340
Columbia University 52
Comet Giacobini-Zinner ... 391
Comet Halley 21
Comet IRAS-Araki-Alcock . 324
Comet Tempel 2 102
Comets 324
Compound 1080 309
Computer chess 225, 236, 276, 303
Computer failure 76
Computer languages ... 202, 404
Computer music-copying ... 303
Computer programming ... 202
Computer security 294
Computer simulations, Universe 273, 282
Computers, Cancer treatment 193, 204
Computers, High-speed 345
Computers, Manufacturing with 341
Computers, Sex-difference use of 187
Condon, Joseph 275
Conrad, Ralf 260
Conroy, Glenn 11
Contraceptives
Intrauterine devices 127
HCG modified 74
Male 117
Oral 127, 279
Slow-release 19
Conus geographus 361
Cook, Michael 390
Cooper, Robert 86
Coppens, Yves 11
Copper 281
Corey, David P. 390
Corkin, Suzanne 378
Corn, Evolution of 359
Corneli, Howard 376
Coronary angioplasty 360
Coronary artery bypass surgery 294
Coronary artery disease 133, 360
Cortex, Prefrontal 345
Corticosteroids 218
Corticotropin-releasing factor 84

SCIENCE NEWS INDEX

Vol. 124, Nos. 1-27, July-December, 1983, pp. 1-432
Science Service, Washington, D.C. 20036

A

A. africanus 10, 291
AIDS 54, 302
Abraham, Henry David 104
Abraham, Sidney 103
Abrahamson, James A. ... 4, 165
Accelerators .. 71, 118, 190, 220
Accelerators, Heavy ion 134
Accretion disk 167
Acid precipitation 313
Acid rain 7, 72, 261
Acivicin 186
Ackerman, Thomas 315
Acquavella, J. F. 232
Acquired immune deficiency syndrome *See:* AIDS
Acree, Terry E. 186
Acrylic finish, Automobile .. 149
Adam, A. H. 251
Adams, Charles 119
Addison's disease 84
Adrastea 247
Agent Orange 145, 156, 195, 309
Aggression .. 113, 122, 148, 173
Agriculture 412
Air pollution 360
Aircraft 151
Airliner, Korean Air Lines 007 ..... 196, 393
Airport-landing lights 270
Albritten, Bill 187
Alcator C 311
Alcohol dependency 302
Alcoholism 44, 180
Aldan River, Siberia 6
Aldrich, Richard W. 390
Aleksandrov, Aleksandr 356
Aleksandrov, Vladimir V. 317, 407
Alfalfa, Hairy 117
Alguard, M. J. 374
Alkanes 166
Alldredge, Alice L. 23
Allen, John F 85
Allergic reaction, Heart 344
Allergy, Drugs 392
Alm, Alvin L. 406
Alpha-MSH 23
Alternating Gradient Synchrotron 134
Altman, Sidney 412
Aluminum 213
Alvarez, Luis 312
Alzheimer's disease 5, 213, 374, 389
Ambartsumyan, Viktor 187
American Physical Society .. 329
Ames, Bruce N. 217
Amnesia 378
Amoco Cadiz oil spill 29
Amyloid plaques 389
Anderson, W. French 372
Anemia, Iron-deficiency 281
Angara, Soviet 268
Angioplasty 213, 360
Animal cruelty 118
Animal Welfare Act 118
Animals, Learning experiments 394
Animals, Marine 229, 298
Anomalons 20, 39
Antarctic Convergence 416
Antarctic ice cycles 6, 67
Antarctic seismic station 280
Antarctica 280, 401, 416
Antelope horns 183
Antibodies, Monoclonal . 12, 136, 218, 357
Anxiety 45, 131
Apolipoprotein 341
Appleman, Evan H. 270
Apter, Dan 74
Arctic atmosphere 151
Arctic evolution 197
Arctic ice pack 328
Arctic landing lights 270
Ariane rocket 87
Arinella, Dennis 92
Armbruster, John 93
Arnett, Edward M. 108
Arnold, Ray 343
Arp, Halton "Chip" 254
Artery grafts 375
Artificial intelligence 150
Artvinli, Mustafa 155
Asa, Sylvia 44
Asbestos 155, 311
Asbestos-hazard pay 155
Aspartame 134
Aspirin desensitization 392
Association of American Universities 329
Asteroid crater 312, 398
Atherosclerosis 341
Atherosclerosis, Premature . 341
Athletes, Olympic 360
Atlas, Ronald M. 29
Atlas 247
Atmosphere, Lower 182
Atmospheric carbon dioxide 260
Auchter, Thorne 229
Aumann, Harmut H. 100
Aungst, Bruce J. 14
Aurora Borealis 196
Aviation navigation errors .. 196
Axel, Richard 133
Axelrod, Julius 84

B

BEPC 220
Bach, Zellig 398
Bachmann, Klaus J. 376
Backus, John 202
Bacteria, Cellulose-digesting 248
Bacteria, Ice-triggering 132, 198, 247
Bacteria, Magnetite-producing 308
Bacteria, Soil 280
Bacteria, Wastewater cleanup 234
Badawy, Omar E. 20
Bagusch, Helmut 102
Bailey, Roy 41
Baim, Donald 230
Baird, M. J. 85
Baldrige, Malcolm . 119, 247, 341
Balkwill, David 348
Ball, Leslie D. 294
Baltimore, David 117
Bamboo, Arrow 68
Bantle, John P. 38
Barbacid, Mariano 248
Barber, Richard 301
Barchus, Jack D. 380
Barclay, Leslie W. 279
Baris, Y. Izzettin 155
Barnard 5 324
Barnard's Star 116
Barratt-Brown, Elizabeth ... 7
Barton, Mark 134
Basic, True 404
Basov, Nikolai 187
Bateson, Patrick 396
Batteries, Swallowed 376
Baum, Michael J. 326
Bawden, James 389
Baylink, David J. 141
Becker, Diana M. 344
Becker, R. A. 261
Bedell, Douglas 183
Beere, Polly 360
Bees 154
Beggs, James M. 87, 199
Behavior, Animal 394
Behavior-diet connection 122, 125, 226
Behrendt, John 417
Beichman, Charles 100
Beijing Electron Positron Collider 220
Belle 236, 276
Belousov-Zhabotinskii reaction 180
Belts, Richard P. 59
Benedict, Chauncey 68
Benirschke, Kurt 266
Bennett, Joseph 425
Bennink, H. J. T. Coelingh ... 59
Benowitz, Neal L. 92
Benzo(a)pyrene 155
Benzodiazepines 45
Beran, Donald W. 155
Berg, Walter 151
Bergman, Robert G. 166
Berliner, Hans 237, 303
Berman, Barry L. 374
Berry, Joseph 314
Beutler, Ernest 249
Bharati, Saroja 344
Bienenstock, Arthur 228
Bifluoride ion 149
Biological clock 154
Biological reactor 313
Bioreactor 234
Biotechnology 119
Biotechnology industry 412
Bipedality 8
Bird song learning 394
Birds, Pacific 298
Birks, John 315
Birth defects test 116
Bishop, William 247
Black, Roger 104
Black holes 19, 407
Blackburn, Henry 133
Blackmun, Harry A. 38
Blakemore, Richard 308
Blanch, Harvey W. 235
Bland, Roger 39
Blass, Elliot M. 136
Blayney, Douglas W. 149
Blood, Artificial 360
Blood cells, Red 344
Blood chemiluminescence .. 281
Blood clotting factor 372
Blood clots 413
Blood pressure, High *See:* Hypertension
Blood vessels 168, 213
Bloom, Floyd E. 212
Bluford, Guion S. 165
Boatner, Lynn A. 105
Boaz, Noel 3
Bogal-Albritten, Rosemarie . 187
Bogan, James 181
Boggess, Nancy 324
Bogolyubov, Nikolai 187
Bograd, Michele 187
Boksenberg, Alec 253
Boltzmann machine 150
Bonaventura, Celia 405
Bonaventura, Joe 405
Bone disease 140
Bone loss, Alcoholics 44
Bond, Howard E. 37
Bond, Victor 331
Borysenko, Joan Z. 7
Botvinnik, Mikhail 303
Boudjouk, Philip 186
Bowers, Kenneth 248
Brain, Dopamine pathways .. 196
Brain damage, Fetal 164
Brain/Evolution 101
Brain genes 212
Brain/Memory and learning 369, 378
Brain/Mental retardation ... 154
Brain opiate system 359
Brandenstein, Daniel 165
Brandin, David H. 294
Brandt, Edward N. Jr. 55
Breast cancer therapy 376
Breeder reactor ... 52, 126, 329
Breggin, Peter 214, 323
Breier, Alan 248
Brenner, Sydney 232
Briggs, Geoffrey 87
Briggs, Richard J. 181
Brodie, Herbert 74
Bromine gas 151
Bronstein, Phyllis, ... 172
Brooke, James A. 61
Brooks, Jack 292
Brown, Herbert C. 107, 259
Brown, R. Hamilton 36
Brownstein, Alan 372
Brucato, Robert 58
Buckley, Joseph P. 292
Bueche Award 311
Buescher, Ronald 93
Bulkley, Bernadine Healy ... 295
Bull, Richard 103
Bumpers, Dale 261
Burger, Robert M. 358
Burn diagnosis 230
Burns, Joseph H. 295
Bush, Mitchell 405
Buster, John E. 69
Bypass surgery 294
Byrd, Robert 359

C

CBLI 357
CRF 84
Cadmium 122
Caffeine 344
Cahill, Daniel F. 70
Calame, Kathryn 117
Calandra, Joseph 276
Calcitriol 373
Calcium 103, 226
Caldwell, Martyn 86
California coast 392
Calloway, C. Bradford 248
Cambrian-Precambrian boundary 6
Campbell, Donald 277
Campbell, Murray 237
Campylobacter jejuni 105
Cancer
Brain 302
Breast 74, 279, 376
Cervical 279
Compensation Act 330
Computer-aided treatment 193, 204
Esophageal 88
Eye 193, 204
Foods 217
Formation 154
Liver 127
Lung 248
Prostate 92
Radiation exposure 127
Risk 69
Skin 232
Spinal 204
Treatment 193, 204, 216
Virus 149
Cantrell, John H. Jr. 230
Canuto, Vittorio M. 346
Carbon, John A. 12
Carbon-carbon bonds 166
Carbon dioxide, Atmospheric 166, 260
Carpenter, Barry K. 109
Carpenter, Charles B. ... 219, 357
Casey, Daniel E. 214
Caskey, C. Thomas 90
Castelli, Benedetto 347, 387
Castro, Joseh R. 204
Cataract-removal costs 215
Catholic University of America 52
Cats 75
Cavalli-Sforza, Luigi L. 101
Cell division 12
Cellulose-digesting bacteria . 248
Center for Advanced Materials 345
Centrella, Joan 284, 285
Cerebellum 380
Cerklewski, Florian 281
Chalk, Rosemary 329
Chandrasekhar, Subrahmanyan 278
Chang, Shih-Bin 308
Channeling radiation 374
Channing, Cornelia P. 92
Chaos, Mathematics of 65, 76
Chapman, Clark 87
Char, Devron 204
Charlton, Valery 267
Charron, Laura 21
Chase, Thomas N. 374, 409
Chatterjee, Sankar 357
Cheese making 55
Chemical companies 93
Chemical reactions 168, 186
Chemical-separating scheme 4
Chemical waves 180
Chemiluminescence, Blood . 281
Chemtob, Claude M. 164
Cherry, John P. 28
Chess, Computer 225, 236, 276, 303
Chess, Computers versus humans 225, 236
Chestnut, Charles III 373
Chien, Chia-Ling 85
Children, Deaf 73
Chlorinated water 103
Chlorine 226
Chocolate 262
Choi, Duck K. 197
Cholesterol 281
Cholesterol-lowering diet .. 263
Cholestyramine 341
Choline chloride 249
Chorionic villi sampling 116
Choroidal melanomas .. 193, 204
Chow Man-yu 220
Christensen, A. Sherman ... 377
Christian, John J. 249
Christiansen, Robert 327
Chromosome fragile sites 69
Chromosomes 12
Chromosomes, Artificial 248
Chrousos, George P. 84
Chu, Steven 281
Cicerone, Ralph 182
Cigarette smoking 343, 360
Cigarettes, 'Low-nicotine' .. 92
Ciguatoxin 166
Citrus peel oil 231, 323
Clark, Roger N. 36
Clark, William P. 261
Claussen, M. J. 407
Clavicle, Sahabi 3
Clay, Don 119
Cleft palate 359
Clement, Jean Luc 412
Climate, El Niño's effect 298
Climate, Greenhouse effect . 260
Climate Forecast Center ... 155
Clinch River Breeder Reactor 52, 126, 329
Clocks, Gravitational 346
Cloud, Preston 6
Clouds, Hydrogen 253
Clyde, Robert A. 234, 275
Coal 93, 133, 177, 189
Coal gasification project 329, 393
Cobalt 122
Cocoa butter crystals 262
Codeine 126
Cohen, Jack S. 251
Cohen, William 375
Cola 14
Coleman, William T. 183
Collagen 232
Collagen denaturation 230
College students 187
Collen, Déseré 340
Colliding beam machines ... 220
Colligan, Robert C. 228
Collins, John A. 340
Columbia University 52
Comet Giacobini-Zinner ... 391
Comet Halley 21
Comet IRAS-Araki-Alcock . 324
Comet Tempel 2 102
Comets 324
Compound 1080 309
Computer chess 225, 236, 276, 303
Computer failure 76
Computer languages ... 202, 404
Computer music-copying ... 303
Computer programming ... 202
Computer security 294
Computer simulations, Universe 273, 282
Computers, Cancer treatment 193, 204
Computers, High-speed 345
Computers, Manufacturing with 341
Computers, Sex-difference use of 187
Condon, Joseph 275
Conrad, Ralf 260
Conroy, Glenn 11
Contraceptives
Intrauterine devices 127
HCG modified 74
Male 117
Oral 127, 279
Slow-release 19
Conus geographus 361
Cook, Michael 390
Cooper, Robert 86
Coppens, Yves 11
Copper 281
Corey, David P. 390
Corkin, Suzanne 378
Corn, Evolution of 359
Corneli, Howard 376
Coronary angioplasty 360
Coronary artery bypass surgery 294
Coronary artery disease 133, 360
Cortex, Prefrontal 345
Corticosteroids 218
Corticotropin-releasing factor 84

Cosimi, A. B. 357
Cosmology, Histories of 273, 282
Cosmonauts 356
Costa, Erminio 45
Cotransformation 133
Cowan, Carolyn Pape 172
Cowan, Philip A. 172
Cox, David R. 266
Coyle, Joseph T. 374
Coyotes 309
Crabtree, Robert H 166
Cragg, Andrew 375
Crampton, George 342
Crapo, Phyllis A. 38
Craters, Impact 312, 398
Crawford, Henry 358
Cray Blitz ... 225, 236, 276, 303
Creationism 262
Cretaceous-Tertiary boundary 312, 329
Crick, Francis 188, 232
Cries, Baby 327
Crippen, Robert 4
Crop damage 127, 132
Crosby, Donald 390
Crowder, William E. 91
Cruikshank, Dale P. 36, 303
Crutzen, Paul 315
Crystal structure 374
Crystals, Holographic data storage 105
Ctenophore fossils 29
Cugini, John 404
Cushing's disease 44, 84
Cutler, Neal R. 154
Cuzzi, Jeffrey N. 295
Cyclosporine 118, 167, 218

D

DCPTA 68
DDT 199
DNA, Mitochondrial 101
DNA double helix 232
DON 186
DSM III 161, 170
DSDP 102, 231
Dagle, Gerald 14
Dahlstrom, W. Grant 228
Dahn, Conard 116
Dairy farmers 74
D'Amato, Alfonse M. 29
Daschle, Thomas A. 156
Datz, Sheldon 374
Daunton, Nancy 342
Davidson, Ronald C. 311
Davies, John 102
Davies, P.C.W. 153
Davis, Kenneth L. 214
Davis, Marc 283
Davis, Robert B. 203
Dawson, Mary 197
Dayanandan, P. 89
Deaf children 73
Dean, Dennis 312
DeBold, Joseph F. 326
Decker, Robert 392
Deep Sea Drilling Project 102, 231
Dellarco, Michael 390
DeLoach, John R. 344
DeLuca, Hector 373
Delusions 393
Demianski, Marek 152
Deming, Drake 181
Dental sealants 389
Department of Defense 135
Department of Energy . 52, 405
Department of Interior 247, 261
Depression 84
Derr, John S. 412
Derryberry, John S. 342
Desch, Michael D. 215
Developing nations 215
Development, Genetic analysis 232
Diabetes 38, 44
Diamond, Adele 344
Diamond, Milton 86
Diamond 374
Diatom mats 23
Dichlorophenoxy-triethylamine 68
Diet, Cancer/anticancer 214
Diet-behavior 122, 125, 226
Dietz, Robert S. 312
Digitalis 230
Dimick, Paul S. 262
Dinosaur extinction 300
Dinosaurs 70, 312, 357
Dioxin contamination 145, 156, 309, 377, 390, 406
Diphenhydramine 392
Dirac, P.A.M. 346
Disability, Developing countries 215
Djerassi Carl 117
Dogs 105
Donegan, N.H. 380
Dopamine 196
Doppelt, Samuel H. 140
Doremus, Robert 103
Down's syndrome 74, 154
Drake, Stillman 347
Dreams 188, 243, 291
Drell, Sidney 228
Drexhage, Martin G. 103
Drinking water 249
Drought 127
Drug, Organ transplant 167
Drug allergies 392
Drug delivery 344, 392
Drug desensitization 392
Drug Enforcement Administration 136
Drug production, Space .. 4, 231
Drug use 377
Drugs, Naturally occurring 289, 300
Duffy, Henry A. 196
Dukart, R.J. 197
Dust rings, Planetary 324
Dust rings, Solar 277
Dvorak, John 25
Dyer, Robert 174
Dywan, Jane 248

E

Earthquake lights 412
Earthquakes
Moon influenced 54
Predictions 404
Turkey 293
U.S./California 404
U.S./Charleston 93
U.S./Coalinga, Cal. 388
U.S./Idaho 293
U.S./Long Valley, Cal. .. 33, 40
Earth's gravity field 39
Earth's shape 39
Eaton, Jerry 388
Ediacarian period 6
Edmonds, James D. 163
Egg maturation 92
Ehrlich, Paul . 306, 314, 361, 407
Eichelberger, John 43
Eisner, Thomas 293, 306
Eittreim, Steve 280
Ekman, Paul 182
El Niño 298
Electricity 126
Electricity from fuel cells 74, 376
Electrophoresis, Continuous flow 4
Elephants 289, 300
Ellis, John L. 20
Ellsworth, Linda 69
Ellsworth, William 404
Embryo transfers, Human ... 69
Emotions 182
Emtage, J.S. 55
Endorphins 136
Energies, High 21
Energy consumption, Residential 187
Engelgardt, Vladimir 187
Enhancer elements 117
Ennis, Bruce 173
Environmental Action 198
Environmental data 216
Environmental Protection Agency 119, 135, 229, 361, 393, 406
Environmental Task Force ... 198
Enzyme immunoassay 166
Ephedrine 392
Epilepsy 76
Epp, David 27
Epstein-Barr virus 302
Erionite 155
Eron, Leonard D. 148
Eshleman, Von R. 28
Esposito, Larry W. 213
Estes, William K. 396
Estradiol 117
Estrogen deficiency 140
Estrogens, Synthetic 127
Ethanol metabolism 180
Ethology 394
Ethylene dibromide 229
Etzel, James 249
European Space Agency 87, 246, 373
Evaporation, Quantum 85
Evenson, Kenneth M. 263
Evolution, Arctic 197
Evolution, Brain-driven 101, 179
Ewing, Larry L. 117
Exercise 360
Exinites 133
Extinctions, Mass 212
Eye disease 118
Eye protection 44
Eye tumors 193, 204

F

FM stations 92
Fabian, John M. 4, 5
Factory, Automated 341
Fahlman, Scott E. 150
Fairbank, William H. 39, 313
Fairchild Industries 231
Falk, Dean 11
Faltings, Gerd 58
Farley, John 44
Farquhar, Robert 391
Fat cells, Women 44
Fathers 172
Faults, Buried 388
Fear, Irrational 164
Fearick, R.W. 374
Feduska, Nicholas J. 219
Feldman, Jay 187
Femininity 161, 170
Fermi National Accelerator Laboratory 21, 118
Ferromagnets 6
Fertility treatment 59
Fetus, Brain damage 164
Fetus, Growth 12
Fetus, Growth-retarded 241, 250, 266
Fetus, Immunized 198
Fetus, Sex-test 216
Fever-reducing agent 23
Fiber optics 103
Fiber fermenter 234, 275
Finkelstein, David 61, 152
Finley, Elizabeth 281
Fireflies 309
Fish, Sex change 86
Fishbein, Diana 125, 173
Fisher, Daniel 312
Fiske, Richard S. 139, 141
Fitzgerald-Hayes, Molly 12
Fitzhardinge, Pamela 252
Flach, Frederic F. 126
Flaser, F. Michael 28
Flerov, Georgii 187
Fletcher, Eugene C. 360
Flier, Jeffrey 249
Fluoridation 389
Fluorine 270
Fly ash, Lignite 302
Fly larvae 293
Foege, William H. 344
Folkman, Judah 168
Folsom, Aaron R. 360
Fomalhaut 406
Foods, Carcinogenic 217
Ford, Peter G. 28
Ford, Vincent 390
Foreman, Daryl 117
Formaldehyde 361
Formaldehyde foam insulation 165
Fort, Pavel 74
Fossils, Antarctic 6, 67
Fossils ctenophores 29
Foundation on Economic Trends 198
Fowler, William A. 278
Fox, Eugene 244
Fox, H. 266
Fox, James G. 105
Fox, Michael W. 198
Fox, Thomas O. 326
Foy, Charles 127
Fractional charge 39, 313
Fragile sites, Genetic 69
Frame, Boy 141
Frank, Bess 68
Freezing insect embryos 28
Freezing tree tissue 28
Freis, Edward 372
Frenk, Carlos S. 283
Friedmann, Theodore 91
Friesen, Wallace V. 182
Frisbie, William 196
Frost damage, Gene splicing 132, 198, 247
Fry, June 126
Fuel burning, Underwater .. 405
Fuel-cell power plant ... 74, 376
Fuel cells, First-generation .. 74
Fuller, R. Buckminster 23
Fung, Ho-Leung 14
Fungal toxins 270
Fungi collections 28
Fungus, White-rot 313
Furnace, Heat-pipe 270
Fusion, Controlled 268, 281, 311, 332

G

GABA 45
GnRH therapy 59
Gailey, Paul 92
Gaitan, Eduardo 59
Galaxies, Seyfert 253
Galaxy center 407
Galaxy formation 273, 282
Galileo Galilei 337, 347, 387
Gallagher, John C. 140, 373
Gambierdiscus toxicus 166
Gandhi, Indira 425
Ganssauge, Eberhard R. 20
Ganz, William 413
Garbutt, James C. 214
Gardening 279
Gardner, Dale A. 165
Garmon, Linda 99
Garnett, E. Stephen 196
Garriott, Owen K. 246
Garthe, James 74
Geballe, T.R. 303
Geiger, Jack 407
Geis, James W. 94
Geist, Valerius 183
Gene, Myelin basic protein .. 345
Gene defect diagnosis 90
Gene function 212
Gene markers/diseases ... 311, 341, 342, 408
Gene transfer 133
Gene transplant 412
Genes, Brain 212
Genetic engineering, Dye ... 412
Genetic engineering, Plants 132, 198, 247, 412
Genetic mechanics 232
Genetically engineered life forms 132, 198, 247
Geomagnetic storms 329
George, T. Adrian 270
Gerstein, Dean R. 119
Geschwind, Norman 164
Ghiorse, William 348
Giammo, Sam 85
Gibert, Stephen 407
Gill, Thomas J. III 198
Gillett, Fred 100
Gillis, Edward 376
Gilman, Donald L. 357
Ginsburg, Robert 213
Gioia, Isabella 253
Glaciers, Melting 392
Glaessner, Martin F. 6
Glass, Leon 77
Glass, Robert 340
Glass, Borosilicate 413
Glasses, Halide 103
Glasses, Metallic 85
Glaucoma 105
Gleitman, Lila R. 73
Glenner, George 389
Gleckman, Dan 196
Glomar Challenger 231
Glucose consumption 154
Glueck, Charles J. 263
Glutaminase 186
Glutamine 186
Glue, Nerve 361
Glycolysis 12
Glyphosate 346
Goeddel, David 216
Goiter 59
Gold, Philip 84
Gold nuggets 280
Goldhaber, Marilyn 92
Goldin-Meadow, Susan 73
Goldman, David 405
Goldman, Itzhak 346
Goldman, Robert M. 105
Golman-Rakic, Patricia 345
Goldstein, Norman 41
Gomez, Fidela 409
Goodman, Major M. 359
Gore, Albert Jr. 328
Goto, Yoshio 281
Gould, Harvey 358
Gould, James L. 395
Gould, Stephen Jay 101, 339
Gout 90, 131
Gower, Albert 303
Gracely, Richard H. 359
Graham, Ronald L. 58
Granatstein, Victor L. 332
Granulocyte production 70
Granulopoietin 70
Grauer, Albert D. 36
Graver, L. Michael 344
Gravitational entropy 152
Gravitational theory, Nonsymmetric 152
Gravity inversion boots 105
Gravity theory 60, 152, 163, 307
Gray, W.R. 361
Great Plains Coal Gasification Project 329, 393
Green, Dan 102
Green, Richard F. 36, 253
Greenberg, Allen 165
Greenberg, James 260
Greenberger, Paul A. 392
Greenhouse effect 260
Greenland, Paul 26
Greiner, Douglas 358
Griffith, William C. 14
Griggs, Jim 25
Grigson, James 38
Grindlay, Jonathan E. 214
Grossman, William 230
Groundwater contamination .. 119, 229, 348
Groundwater microbiology . 348
Grover, John W. 340
Groves, John T. 156
Growth hormone, Human .. 412
Growth retardation, Intrauterine 241, 250, 257, 266
Gualtieri, C. Thomas 214
Guayule 68
Guidotti, Alessandro 45
Guion, Robert 37
Guire, Patrick E. 167
Gundlach, Erich R. 29
Gusella, James F. 311
Guth, Alan H. 20, 152
Guy, James D. 164

H

HCG, Modified 74
HERA 220
HPRT gene 90
Hadar fossils 1, 8
Hadron-Electron Ring Accelerator 220
Hair analysis 122, 173
Haislip, Gene 343
Halide glasses 103
Hall, Charles 92
Hall, John L. 281
Halpern, Leopold 60
Hamsters 105
Hanley, Mary Lynn 215
Hansen, Roger P. 363
Hardenbergh, Firmon 93
Harlass, Stephen R. 59
Harper, Al 406
Harrington, Robert 116
Harvey, David 252
Harvey, Paul M. 116
Harwood, David 6
Hatch, Maureen 156
Hatch, Orrin 330
Hatcher, Patrick 93
Hatfield, Mark O. 407
Hauck, Frederick H. 4, 5
Hawaiian Islands 327
Hay, Alastair 156
Hayatsu, Ryoichi 93
Hayden, Bruce 216
Haymon, Rachel M. 412
Hazardous wastes See: Wastes, Hazardous
Health hazards 29
Heaney, Robert P. 140
Hearst, John E. 102
Heart, Allergic reaction 344
Heart, Elderly 360
Heart attacks 340, 413
Heart disease 103, 226, 343
Heart disease, Premature ... 344
Heart disease predictor 133
Heart disease risk 263
Heart failure, Congestive ... 230
Heart rate, Lowered 360
Heart transplants 209, 218
Heartbeats, Irregular 76
Heat-pipe furnace 270
Heat reclaimers, Cow's milk 74
Heimbach, David M. 230
Heinrich, Bernd 395

Helicopters ... 413
Helium ions ... 204
Hellings, Ronald W. ... 346
Hemophilia ... 372
Hemosponge ... 405
Hemphill, Robert ... 270
Hendrey, George ... 72
Hepatitis B virus ... 302
Herberman, Ron ... 148
Herpes ... 413
Herpes simplex virus ... 302
Herring, James R. ... 133
Herzenberg, Leonard A. ... 12, 117
Hess, Robert D. ... 187
Hickey, Leo J. ... 197
Higgins, Robert ... 229
Higgs, Peter ... 190
Higgs particles ... 190
High blood pressure
See: Hypertension
Hill, David ... 41
Hill, George R. ... 189
Hilleman, Maurice R. ... 328
Hinners, Noel W. ... 22
Hinton, Geoffrey E. ... 150
Hippocampus ... 378
Histamine ... 344
Hobbie, John ... 166
Hobson, J. Allan ... 188
Hodel, Donald P. ... 52, 126
Hoenig, Stuart A. ... 358
Hoffman, Robert ... 425
Hofman, Albert ... 92
Hokama, Yoshitsugi ... 167
Holbrook, John ... 38
Holcomb, Robin ... 327
Hollander, Anne ... 119
Hollis, Karen L. ... 394
Holloway, Ralph ... 11
Holmberg, Scott D. ... 377
Holographic data storage
crystals ... 105
Hominid fossils ... 1, 8
Homopolar generators ... 268
Hopfield, John J. ... 188
Horowitz, Herschel S. ... 389
Horsefly larvae ... 293
Horses, Early ... 197
Horvath, Steve ... 360
Hot spot volcanoes ... 24
Hotton, Nicholas ... 300
Houk, James ... 380
Howell, Robert R. ... 303
Hsieh, K.C. ... 189
Hudson, J. Michael ... 93
Huessy, Hans R. ... 131
Huffman, R.E. ... 196
Human chorionic gonadotropin,
Modified ... 74
Huntington's disease ... 311, 408
Hurley, David ... 59
Hurricanes ... 216
Huyett, Richard ... 413
Hyatt, Robert ... 236, 276, 303
Hydrazine ... 270
Hydrogen clouds ... 253
Hydrogen reaction ... 168
Hynes, M.V. ... 374
Hyperion ... 59
Hypertension ... 92, 105, 302,
360, 372
Hypnosis ... 248
Hypothyroidism, Congenital 74

I

IUDs ... 127
Ianniello, Louis C. ... 53
Ice fog ... 303
Ice pack, Arctic ... 328
Ictidosaur ... 357
Identifier sequence ... 212
Ignition, Spontaneous ... 133
Ilan, Judith ... 12
Illusions ... 393
Iltis, Hugh H. ... 359
Immelmann, Klaus ... 395
Immune function ... 5
Immune system ... 148
Immunity/Stress ... 7
Immunosuppressive drugs ... 218
Impact ... 215
Imprinting ... 394
Inaba, Humio ... 281
Indigo ... 412
Industrial Bio-Test
Laboratories ... 276
Infant-mother bonds ... 198
Infertility ... 340
Influenza virus ... 302
Infrared scanners ... 413
Infrared Astronomy
Satellite ... 100, 102, 321
324, 356, 406
Insect bodies ... 270
Insect embryo freezing ... 28
Insecticide, Natural ... 231
Insomnia ... 342
Insulation, Formaldehyde
foam ... 165
Integrated optics ... 261
Interferon ... 302
Interferon, *Gamma-* ... 216
Interferon, Human ... 216, 412
Interleukin-2 ... 54
Intervening sequences ... 212
Intrauterine growth
retardation 241, 250, 257, 266
Intrauterine position ... 326
Intriligator, Devrie ... 21
Intron ... 117
Io ... 303
Ion beams ... 204, 268
Iron-silver alloy ... 85
Irving, Patricia ... 127
Island volcanoes ... 327
Isobe, Shizo ... 277
Ivanov, I. ... 134

J

Jablonski, David ... 212
Jackman, Rodger ... 293
Jackson, Dallas ... 27
Jacobs, Barry ... 328
Jacobson, Peter ... 140
Jaffe, Richard ... 376
Jain, P.L. ... 20
James, Mary ... 228
Janes, David E. ... 70
Jemmott, John B. III ... 7
Jenkins, Herbert M. ... 394
Jensen, George ... 270
Jewell, J.L. ... 279
Jewell, William ... 376
Jick, Hershel ... 392
Johanson, Donald C. ... 8
Johnson, Arthur ... 72
Johnson, H.H. ... 52
Johnson, Richard ... 229
Johnson, Robert K. ... 52
Johnson, Torrence V. ... 303
Johnston, C. Conrad ... 141
Jones, Georgeanna ... 92
Jones, Howard ... 92
Jordan, Angel G. ... 22
Josephson junctions ... 345
Jovanovic, Drasko ... 118
Judek, Barbara ... 20
Jupiter's magnetic field ... 215
Jupiter's moons ... 247
Jupiter's ring ... 295

K

K-ras gene ... 248
Kachman, William ... 172
Kallarakal, Varkey ... 116
Kan, Y.W. ... 216
Kandel, Eric R. ... 328
Kapitza, Serguei ... 407
Kaplan, Lawrence ... 88
Kaplan, Marcie ... 170
Kaplan, Melvin ... 126
Kaplan, Norman ... 372
Kaplin, Norman ... 22
Kara crater ... 312
Karathanasis, Sotirios K. ... 341
Karl, David ... 27
Karsh, Eileen ... 75
Kato, Keiichi ... 74
Katz, Andrea ... 267
Kaufman, David W. ... 127
Kaufman, Peter B. ... 88
Kay, Stanley R. ... 104
Kazanas, Demetrius ... 167
Kazman, Sam ... 309
Kearney, John J. ... 7
Keller, Evelyn Fox ... 244
Kelley, William N. ... 90
Kelly, Regis B. ... 361
Kemeny, John G. ... 404
Kennedy, Edward M. ... 407
Kennedy, J. Ward ... 413
Keolian, Robert ... 313
Kephart, J.O. ... 374
Keplinger, Moreno ... 276
Kern, Frank ... 125
Keyes, Dale ... 260
Keyworth, George A. II ... 7, 72
Khalil, M.A.K. ... 260
Kidd, Aline H. ... 75
Kidney hormone ... 373
Kidney transplants ... 218, 357
Kidneys ... 302
Killip, Thomas ... 294
Kilonsky, Bernard ... 301
Kilston, Steve ... 54
Kimbel, William ... 8
King, James M. ... 23
Kirschvink, Joseph ... 308
Kissebah, Ahmed ... 44
Klatz, Ronald M. ... 105
Klein, Fred ... 54
Klein, R.K. ... 374
Klibanov, Alexander M. ... 235
Knopf, John ... 372
Knopoff, Leon ... 54
Knott, Karl ... 373
Koch, Paul L. ... 312
Koehler, Carlton S. ... 279
Koop, C. Everett ... 343
Korgeski, Gregory P. ... 309
Koski, Randolph ... 412
Koyanagi, Robert ... 26
Kozloff, Lloyd ... 132
Krakauer, Henry ... 218
Krebs, Martha ... 345
Kretchun, Thomas M. ... 279
Krill ... 416
Krishnan, Engikolai ... 376
Krishnan, Leela ... 376
Kristensen, Reinhardt M. ... 229
Krizek, Donald ... 127
Krugman, Saul ... 328
Kryder, Mark H. ... 22
Kuc, Joseph ... 377
Kühr, H. ... 167
Kumar, S. ... 168
Kunkel, Joseph G. ... 101
Kupfer, Carl ... 118
Kurtz, Theodore W. ... 372
Kurtz, Thomas E. ... 404

L

LEP ... 71, 220
LHRH analogues ... 92
LSD ... 104
Laboratories, Federal
See: Laboratories, National
Laboratories, National ... 53
Laboratories, Testing ... 276
Laboratory animals ... 118
Lachenbruch, Arthur ... 42
Lamberson, Donald ... 86
Laminant, Glass ... 413
Landrigan, Philip J. ... 55, 156
Lange, A. ... 155
Langer, Robert ... 168
Language learning ... 73, 394
Large Electron-Position
Collider ... 71, 220
Large number hypothesis ... 346
Lasers
Angioplasty ... 213
Cold/paralysis treatment ... 245
Data storage ... 105
Eye protection ... 44
Green/controlled fusion ... 281
Hydrogen reaction ... 168
Martian natural ... 181, 195
Multi-wavelength ... 44
Plant nutrients measure ... 155
Space ... 85
Surgery ... 213
Ultraviolet light ... 186
Weapons tests ... 85
X-ray and ultraviolet
range ... 197
Lasker Awards 1983 ... 328
Latimer, Bruce ... 8
Lavelle, Rita M. ... 393
Lawrence, Miles ... 216
Layde, Peter M. ... 127
Lead ... 122
Lead absorption ... 14
Learning ... 378, 385, 394
Learning theory ... 394
Leary, Timothy ... 104
Leasecraft ... 231
Lederman, Leon ... 118, 190
Lee, Rex ... 165
Lee, T.D. ... 134
Lefkowitz, Monroe M. ... 148
Lemur, Collared ... 257, 266
Leo, Frank ... 375
Leon, Gloria R. ... 309
Leonberger, F.J. ... 261
Leopold, Roger ... 28
Lerner, Richard ... 213
Lesch-Nyhan
syndrome ... 90, 131, 147
Lesquerella palmeri ... 186
Lesso, William ... 216
Leukemia ... 127
Leukemia-lymphoma, T-cell ... 149
Levenson, Robert W. ... 182
Levi, Roberto ... 344
Levy, David ... 276, 303
Levy, Robert ... 341
Levy, Sandra M. ... 148
Lewis, Nathan S. ... 376
Lichtenberg, Byron K. ... 246
Lie detectors ... 292, 398
Liebert, James W. ... 37
Liebman, Gerald ... 228
Life, Extraterrestrial ... 181
Life, Origin of ... 150
Life chemicals ... 150
Lifshitz, Fima ... 74
Ligands ... 166
Light, Frequency of ... 281
Light pollution ... 58
Lightning ... 245
Lignite fly ash ... 302
Lilly, Eli and Company ... 361
Limberger, Dominique ... 301
Limbs, Artificial ... 361
Lin, James ... 119
Lindal, Gunnar F. ... 28
Lindgren, Michael A. ... 313
Lindh, Allan ... 404
Lindow, Steven ... 132
Lindsay, Robert ... 140
Lindstrom, Peter ... 358
Linscott, Dean L. ... 346
Lione, Armond ... 213
Lipper, Evelyn ... 252
Lippman, Marc ... 148
Lips, Paul ... 141
Lipton, James M. ... 23
Lithium hydride ... 374
Lithium test ... 14
Liu, Cheng-Quan ... 92
Liu, Kwang-San ... 12
Litovitz, Theodore ... 52
Liver transplants ... 218
Lloyd, James E. ... 309
Lo, K.Y. ... 407
Long Valley volcanic
system ... 33, 40, 388
Longevity ... 119
Lord, Donald G. ... 6
Loricifera ... 229
Lou Gehrig's disease ... 105, 119
Love, Thomas ... 61
Love Canal ... 29, 232, 245, 249
Lovejoy, C. Owen ... 8
Low, Frank ... 406
Lowe, P.A. ... 55
Luck, Jean-Marc ... 329
Lucot, James ... 342
Lucy, Hominid ... 1, 8, 291
Luminous phenemona ... 412
Lung cancer ... 248
Lung damage ... 14
Lung transplants ... 218
Lunine, Jonathan I. ... 37
Lutton, John D. ... 70
Lutty, Gerard ... 168
Lyakhov, Vladimir ... 356
Lymphoma, T-cell leukemia ... 149
Lyon, Terry L. ... 44

M

MMPI ... 228
Maccacaro, Tommaso ... 253
Maciejko, James J. ... 133
MacQueen, Robert ... 277
Macrophages ... 218
Magellanic Clouds ... 390
Magnetic domains ... 6
Magnetic recording research 22
Magnetism, Marine
sediments ... 308
Magnetite-producing
bacteria ... 308
Magnetostriction ... 6
Mahler, Hafdan ... 215
Maihara, Toshinori ... 277
Mangelsdorf, Paul C. ... 359
Manning, Douglas M. ... 262
Mantell, Gideon ... 312
Manufacturing,
Computer-aided ... 341
Mares, Jan W. ... 364
Marigolds ... 279
Marijuana/Paraquat
spraying ... 55, 136, 187
Marine animals, Pacific ... 298
Marino, Thomas A. ... 344
Mark, Hans ... 87
Mark II ... 71
Marler, Peter ... 396
Marlow, A.R. ... 61, 307
Mars laser, Natural ... 181, 195
Marshak, Robert E. ... 329
Marshall, James ... 232
Marshall, John C. ... 396
Marshall, Wesley ... 44
Martin-Marietta Corp. ... 405
Martinez, LeeAnne ... 23
Marx generators ... 268
Mason, James O. ... 344
Massey, Frank Jr. ... 377
Mastodons ... 312
Masursky, Harold ... 356
Materials science center ... 52, 345
Maternal deprivation ... 198
Mathew, Roy J. ... 344
Mathewson, Don ... 390
Matsakis, Demetrios ... 398
Mazur, Barry ... 58
Measles ... 377
Mechanical sector scanners ... 375
Medical camps ... 215
Medication, Psychiatric ... 393
Meier, Mark ... 392
Melanoma, Malignant ... 232
Melott, Adrian ... 284
Memory ... 248, 369, 378, 380
Menarche, Early ... 74
Mendae, Steve ... 262
Meng, Ching ... 196
Mental health survey, U.S. ... 302
Mental illness ... 126
Mental patients ... 393
Mental retardation ... 154
Menzel, Randolf ... 394
Merbold, Ulf ... 246, 373
Mercury poisoning ... 119
Merlin, Jean-Claude ... 102
Mertz, Walter ... 217
Meson detector ... 190
Mesothelioma ... 155
Metallic glass ... 85
Metcoff, Jack ... 266
Meteor shower, Geminid ... 324
Meteorite, Murchison ... 150
Meter ... 263
Methane ... 28, 74, 260
Methaqualone ... 343
Methyl jasmonate ... 186
Metis ... 247
Metropolitan Edison Co. ... 329
Metzger, Charles ... 363
Munier, Pierre J. ... 140
Meves, Hans ... 390
Meyer, John Sterling ... 344
Meyers, Philip A. ... 102
Mice, Field ... 249
Michael, Richard P. ... 53
Mickey Mouse ... 172, 339
Microbursts ... 151
Microcontamination control 358
Microwave generators, High
power ... 332
Microwaves, High power ... 332
Middleton, Rick ... 187
Mignard, Francois ... 59
Milky Way ... 324
Miller, Charles E. ... 340
Miller, Dan ... 388
Miller, Gus H. ... 119
Miller, Sanford ... 134
Mills, Allen P. Jr. ... 281
Milner, Brenda ... 379
Milner, Robert J. ... 212
Milrinone ... 230
Minnesota Multiphasic
Personality Inventory ... 228
Miscarriages ... 92
Mishkin, Mortimer ... 379
Mitchell, J. Murray ... 138
Mitchison, Graeme ... 188
Mitochondrial DNA ... 101
Miura, Irene ... 187
Moffat, A.F.J. ... 167
Moffat, John William ... 60, 157
Mohnen, Volker ... 72
Molecular biology ... 232
Molokai ... 327
Molybdenum ... 270
Monahan, John ... 173
Monk, Timothy H. ... 154
Monoclonal
Antibodies ... 12, 136, 218, 357
Montali, Richard ... 68
Montgomery, Gene ... 62
Moon ... 54
Mordell, Louis J. ... 58
Morey, Gregory ... 132
Morimoto, Masaki ... 116
Morris, R. Curtis Jr. ... 372
Morrison, Frank ... 41
Morrison, Sherie L. ... 117
Morse, Bradford ... 215
Morton, John ... 396

Moth, Male 389
Mother-infant bonds 198
Mothers, Smoking 249
Motion sickness 342, 373
Mountcastle, Vernon B. Jr. 328
Moynihan, Cornelius T. 103
Moynihan, Daniel P. 29
Mulholland, Susan 89
Mumma, Michael J. 181
Murphy, James 39
Murphy, Mark T. 23
Murphy, Martin J. Jr. 70
Murphy, Robert S. 199
Murray, Andrew W. 248
Murray, John P. 172
Muscle glue 361
Music-copying system 303
Musical score 303
Myelin basic protein 345
Myhre, Philip C. 108
Mylander, Carolyn 73
Myznikov, K. P. 221

Mc

McCarley, Robert 188
McCarthy, John 151
McClelland, David C. 7
McClintock, Barbara 244
McClure, James A. 261
McCormick, David A. 380
McCrory, John 155
McElroy, John H. 100
McGraw, John 36
McHone, John Jr. 312
McKelvie, Neil 275
McKenna, Malcolm 197
McKinstry, William 189
McMurtrey, James E. III 155
McMurty, Gary 27
McNeal, Robert J. 182
McNellis, Donald 250

N

NK activity 148
NMR technology 250
Nader, Ralph 306
Nakamura, Kazuaki 327
Naloxone 359
Namias, Jerome 298
Narcolepsy 126
Nasturtiums 279
Nathanielsz, Peter 267
National Academy of Sciences 329
National Center for Advanced Materials 52, 345
National Center for Chemical Research 52
National Environmental Data Referral Service 216
National Institutes of Health 198
National Science Foundation 183, 358
National Zoological Park ... 405
Navigation errors 196, 393
Naylor, Susan L. 311
Nee, Linda 5
Negette, Americo 408
Nelson, Harry 236, 303
Neptune's moon 36
Nerurkar, Lata S. 413
Nerve cell signal 390
Nervous system, Involuntary 182
Neuroleptic drugs 214
Newbold, Robert F. 154
Newborn, Monroe 237
Newborns, Growth-retarded ..241, 250, 257, 266
Newborns, Herpes 413
Night-vision system 413
Nishenko, Stuart P. 404
Nishida, Ritsuo 186
Nishikawa, T. 220
Nitinol 375
Nitrogen, Mid-ocean 23
Nitrogen dioxide 127
Nobel Prizes 1983 .... 244, 278
Nordin, Borje E. C. 140
Norbornyl cation . 106, 259, 275
Norepinephrine 374
Nowicki, Stephen 293
Nuclear magnetic resonance 250
Nuclear power plant accident, Three Mile Island 92, 183, 329
Nuclear reactor accident ... 276
Nuclear submarines 169
Nuclear structure experiments 343
Nuclear war 305, 306, 314, 355, 361, 371, 407
Nuclear wastes 104, 292
Nuclear weapons 187
Nuclear weapons research ... 228
Nuclear weapons tests . 127, 377
Nuclear winter 314
Number theory supposition . 58
Nussbaum, Robert L. 91
Nussenblatt, Robert B. 118
NutraSweet 134
Nutsedge 346
Nycum, Susan H. 294

O

OKT3 357
Oak Ridge National Laboratory 405
Obesity 249
O'Brien, Gregory D. 250
O'Brien, Stephen J. 405
Obsidian glass blades 93
Occupational hazards 361
Ocean-atmospheric system . 298
Ocean circulation 6
Ocean drilling 102
Ocean Drilling Program 231
Ocean dumping 169
Ocean pollution 119
Ochs, Elinor 73
O'Fallon, William 377
Oh, William 267
Oi, Vernon 117
Oil drilling, Offshore 119
Oil formation 102
Oil shale 353, 362, 393
Oil spill, *Amoco Cadiz* 29
Oke, J. Beverley 58
Olah, George A. 106
Olefsky, Jerrold M. 38
Olive, Keith A. 20
Olivera, B. M. 361
Olson, Todd 10
Olter, J. Walt 270
Olympic games 360
Oocyte maturation inhibitor 92
Opiate, Endogenous 136
Optical converter 261
Optical switching devices ... 278
Optics, Integrated 261, 278
Oraflex 361
Organ transplants . 209, 218, 328
Organochlorine pesticides .. 199
Organs selling 328
Orion constellation ... 321, 324
Orion nebula 116
Orser, Cindy 132
Osmium 329
Osteoporosis 140, 373
Otegui, José Maria 276
Otterlund, Ingvar K. N. 20
Ovaries 14, 92
Ovaries, Polycystic disease .. 59
Overell, Robert W. 154
Owen, Tobias 36
Ozone 86, 182

P

PG1159-035 36
PKU 342
Pacey, Gilbert E. 14
Pacheco, Alex 118
Packard, David 53
Packer, Craig 183
Page, Don N. 153
Pain control 359
Palmer, Allison 6
Palmiter, Richard D. 412
Palomar Observatory 58
Pandas 68, 187, 405
Pang, Kevin D. 59
Panicali, Dennis 302
Panno, Samuel V. 292
Panofsky, Wolfgang K. H. ... 118, 220, 406
Pantell, R. H. 374
Paoletti, Enzo 302
Papert, Seymour 203
Paralysis therapy 245
Paranoia 393
Paraplegics 245
Paraquat spraying .. 55, 136, 187
Parduhn, Nancy 280
Parfitt, A. Michael 140
Park, H. 374
Parker, Robert A. R. ... 246, 373
Parker, Ronald R. 311
Parpia, D. Y. 6
Particle beam conference ... 181
Particle Beam Fusion Apparatus II 268
Particle beams 268
Particle physics 60
Particle physics, Cosmology 273, 282
Passamani, Eugene 294
Patrick, Ruth 72
Paul, Steven M. 45
Pavlov, Alexander 407
Pawpaw 28
Peach, J. Dexter 247
Peale, Stanton J. 59
Pearl, John 28
Pearsall, Deborah M. 88
Peck, William A. 140
Peer review 329
Pelicans 49, 62
Pelvic inflammatory disease . 127
Penicillin desensitization ... 392
Penrose, Roger 153
Pergament, Eugene 116
Persinger, Michael 412
Personality disorders .. 161, 170
Personality norms 228
Personality types 7, 75
Pest control 117
Pesticides 229
Pesticides, Toxic 199
Pet, Kind of 75
Peterson, Peter 280
Peterson, R. Neal 28
Pettengill, Gordon H. 28, 277
Phanerochaete chrysosporium . 313
Pharmaceutical Manufacture, Space 4, 231
Phatak, Sharad 346
Phenylketonuria 342
Philander, George 299
Phillips, W. D. P. 251
Phobias 164
Photon particle 190
Photosynthesis 102
Phylum, New 229
Physics facilities, New 190
Physics International 268
Phytoliths 81, 88
Pickles 93
Pike, Malcolm 279
Pilkis, Simon J. 12
Pioneer 303
Pioneer Venus orbiter 21
Piscis Austrinus 406
Placebo 359
Planetary exploration 87
Planetary rings 295
Planets, Minor 324
Plank, James 276
Plant evolution 86
Plant genetics 412
Plant stones 81, 88
Plants, Companion 279
Plants, Nutrient-deficient ... 155
Plastics 186
Play activity 172
Plutonium 14
Plymate, Stephen E. 59
Polinsky, Ronald 5
Pollack, James B. 295, 315
Pollution, Groundwater 348
Polygraph 292, 398
Polymerization, Group transfer 149
Polymers 149
Polypropylene 310
Ponnamperuma, Cyril 150
Popweed oil 186
Positronium 281
Postosuchus 357
Potassium tantalate niobate crystals 105
Prednisone 392
Preschoolers 172
Preston, Ronald 330
Prinn, Ronald G. 213
Prosthetics 361
Proteoglycan 361
Protheroe, R. J. 167
Proton acceleration 118
Prusiner, Stanley B. 389
Psychiatric diagnosis ... 161, 170
Psychiatric disorders 302
Psychiatric drugs 214, 323
Psychiatric medication 393
Psychological test 228
Psychosis predictors 248
Puccinia canaliculata 346
Pulsed power generators ... 268
Pyrite 28

Q

Quaaludes 343
Quantum electrondynamics . 358
Quantum evaporation 85
Quantum mechanics 60
Quark-gluon plasma 20
Quarks 39, 190, 343
Quasar 0630+180 167
Quasars 253
Queehan, John T. 250
Queen, Cary 117
Quensen, John F. 235
Quigg, Chris 190
Quigg, Philip W. 416
Quinn, William G. 394
Quisenberry, Richard 149

R

RNA 412
Radiation, Radiofrequency 70, 92
Radiation exposure 127
Radiation sterilization 310
Radiation therapy, Electron . 376
Radiation victims 330
Radinsky, Leonard 197
Radioactive aerosols 14
Radioactive decay of tritium . 270
Radioactive fallout 377
Radioepidemiological tables . 330
Radiofrequency radiation . 70, 92
Ragelis, Edward P. 166
Rahn, Kenneth 72, 151
Raisz, Lawrence G. 141
Rall, Joseph (Ed) 331
Ramo, Simon 311
Rape 53, 163
Rapp, George Jr. 89
Rapp, Paul E. 76
Rasmussen, Reinhold 260
Rasmusson, Eugene 298
Raup, David 212
Ray, Clayton E. 101
Reagan, Ronald 53, 292
Redmond, Charles 75, 262
Reed, Barbara 125
Reetz, Arthur J. 75
Regier, Darrel A. 302
Reilly, William K. 247
Reitz, Bruce A. 219
Relativity 60
Rennin 55
Rentrop, Peter 340
Reproductive organs 14
Resorcinol 59
Restriction enzyme 408
Retcofsky, Herbert L. 189
Reuben, Eli 413
Reunion Island 327
Reuther, James J. 189
Review of the Year 418
Revuskey, Sam 394
Reynard, William D. 196
Rhee, Ki Soon 281
Rho Ophiuchus 324
Rhoads, Jack W. 59
Rhodopseudomonas capsulata .. 102
Ribonucleic acid 412
Richards, Dave B. 23
Richman, David W. 4
Richter, Burton K. 71, 406
Ride, Sally K. 4, 5
Rifkin, Jeremy 198, 247
Riggs, B. Lawrence 140, 373
Rinalducci, Edward 37
Risk assessment 29
Roach, Arthur 345
Robot vision systems 341
Rock-cutting method 216
Roelofs, Wendell L. 186
Rogulich, Osvaldo 276
Ronnenblick, Edmund 230
Rook, Alain H. 54
Root-Bernstein, Robert S. ... 387
Rosenberg, Lynn 359
Rosenfeld, Charles 267
Ross, Robert M. 86
Ross Sea shelf 280
Rovner, Irwin 88
Rubber production 68
Ruckelshaus, William D. ... 29, 72
Rudakov, Leonid I. 181, 269
Rudden, Marie 393
Rudnick, Isadore 313
Ruelle, David 76
Ruley, H. Earl 154
Russell, John J. 14
Rust, David 245
Rust fungus 346
Rutstein, David D. 180
Ryall, Alan 41
Ryall, Floriana 41
Ryan, John J. 156
Rymer, Michael J. 388

S

SETI 181
SHADE 104
SIDS 327, 344
SS433 214
Sabbagha, Rudy E. 252
Sadler, James 301
Sagan, Carl .. 116, 306, 315, 407
Sahley, Christie L. 395
Sairam, Malur R. 74
Sakharov, Andrei D. 269
Salt 372
Salt domes 292
Salyut 7 space station 356
San Deigo 58
Sanders, Chris 41
Sandimmune 167
Sangster, A. G. 89
Sargent, Wallace L. W. 253
Satellites
Anik C-2 4
Communications 4
HILAT 196
INSAT-1B 165
IRAS 100, 102, 321, 324, 356, 406
ISEE-3 ..... 21, 391
Lageos 39
Landsat 97, 100, 247, 375
OSCAR 10 87
Palapa 2 4
SPAS-1 4
TDRS-1 ..... 22, 100, 165
Weather 247, 375
Satellite solar cells 105
Sato, Katsuro 281
Saturn 215
Saturn's moons 59, 247
Saturn's rings 295
Saunders, Martin 109
Saunders, William M. 204
Savage, Jim 41
Saxe, Leonard 292
Saxitoxin 166
Scalpels, Obsidian glass 93
Scarf, Frederick L. 21
Schaffner, Walter 117
Schaller, George 68
Scharlin, Pat 425
Schauss, Alexander 124
Schechter, A. 156
Schenkman, Noah 105
Scherzer, Tony 303
Schizophrenia 164
Schlikeiser, R. 167
Schmidt, Maarten 253
Schneider, Stephen 316
Schnell, Russell C. 132
Schoenthaler, Stephen . 124, 125
Schopper, Herwig 221
Schreiber, Ralph 301
Schwarzenbach, René 119
Schwarzkopf, Alex 358
Science, Secrecy's effect on . 329
Science education 183
Science funds, Federal 329
Scientific communication ... 329
Scientific conference 181
Seafood toxins 166
Seals 298
Seawater 405
Second, Leap 21, 67, 226
Secrecy 329
Seeber, Leonardo 93
Seidel, Stephen 260
Seiden, Abraham 71
Seiler, Wolfgang 260
Seismic station, Antarctic ... 280
Sejnowski, Terrence J. 150
Sellmyer, David J. 85
Semiconductor devices 358
Semiconductor-liquid junction cells 376
Senility 5, 213, 374, 389
Senut, Brigitte 9
Sepkoski, John 212
Sever, John L. 413
Severns, James G. 105
Sex change, Corn 359
Sex change, Fish 86
Sex differences 187, 326
Sex hormones 44
Sex test, Fetal 216
Sexual differences 326
Sexual violence 53
Shale Oil 353, 362, 393
Shapiro, Irwin I. 346
Shara, M. M. 167
Shaw, Brewster H. Jr. 246
Shaw, G. L. 39
Sheets, Payson 93

Sheppard, D. Craig 231
Sheps, David 360
Shinnick, Thomas M. 212
Shipworm bacteria 248
Shock front 167
Shoemaker, Eugene 212
Showalter, Mark R. 295
Shumway, Norman 218
Sialic acid 70
Sieber, W. 167
Siegel, Ronald K. 300
Sieh, Kerry 388, 404
Sibergeld, Ellen 136, 406
Silver, Mary W. 23
Silver contamination 280
Silver-iron alloy 85
Silvers, Willys 219
Silverstein, Saul 133
Simkin, Tom 138, 312
Simpson, John A. 341
Skol, Robert J. 250
Skolnick, Phil 45
Sladek, Thomas A. 364
Slate, David 236, 276
Sleep, REM 188
Sleep apnea 360
Sleep disorders 342
Sleep/wake cycle 154
Sleeping pills 342
Sliney, David H. 44
Smallpox vaccine 302
Smith, Bradford 295
Smith, Francis W. 251
Smith, Harlin 75
Smith, Mary Jo 310
Smith, Myron E. Jr. 364
Smoking 92, 119, 249, 343, 360
Smoking mothers 249
Smoky 127
Smoot, George F. 20
Snail venom 361
Snails 279
Snell, Peter 360
Snow 303
Snowmelt 313
Snyder, Harry 37
Sobel, Burton 340
Sodium channels, Nerve 390
Sodium chloride 372
Sodium-potassium pumps 249
Sogah, Dotse Y. 149
Soil, Dioxin-contaminated 390, 406
Soils, Acidic 127
Soils, Methane consumption 260
Solar activity 329
Solar cells 376
Solar cells, Satellite 105
Solar films 126
Solar system, Fomalhaut 406
Solar system, Vega 100, 116, 324, 406
Solar System Exploration Committee 277
Soliton, Water 313
Solomon, Kenneth 169
Soloway, Elliot 202
Somatostatin 374
Sones, F. Mason 328
Sorenson, Edgar L. 117
Sorey, Mike 43
Soviet scientists 181, 407
Soviet Venera 15 & 16 ..... 263, 277, 356
Space lasers 85
Space platform 231
Space shuttle 4, 165, 231, 246, 262, 310, 373, 391
Space station, U.S. 84, 199
Space telescope 75
Space weapons 187
Spacelab 1 ..... 246, 262, 310, 373, 391
Sparks, John 267
Spears, J. Richard 360
Spector, Sydney 136
Sperling, Leslie H. 186
Spider, Bola 389
Spinal tumors 204
Spitzer, Robert L. 170
Sponge, Polyurethane 405
Spores, Bacterial 280
Spotnitz, Henry 294
Sprenke, Ken 293
Squire, Larry R. 378
Stanford Linear Accelerator Center 406
Stanford Linear Collider 71, 311
Stanford University 228
Stanley, George D. Jr. 29
Star formation 324
Star VB8 116
Star VB10 116
Star Stein 2051 116
Stark, Harold M. 58
Stars, Evolution of 36
Stars with unseen companions 116
Starzl, Thomas 218
Steak, Well-marbled 281
Stein, Peter 328
Stein, Richard B. 361
Stein, Ross 388
Stein, Zena 252
Stellman, Steve D. 217
Sterilization, Radiation 310
Stern, Jack 8
Stevens, Charles F. 390
Stevens, George 74
Stevenson, Donald D. 392
Stewart, Ian 21
Stewart, T. Dale 101
Stoerts, Nancy 165
Stowe, Mark K. 389
Strand, Kaj Aa. 116
Statospheric chemistry 151
Strauss, John S. 248
Strein, William 172
Streptokinase 340, 413
Stress 7, 148
Stress, Environmental 300
Stress response 84
Stürmer, Wilhelm 29
Submarine, Nuclear 169
Sudden infant death syndrome 344, 327
Sugar fru-2,6-P2 12
Sugar metabolism 125
Sugar substitute 134
Suit, Herman 204
Sulentic, Jack W. 254
Sulfur dioxide 7, 127
Sullivan, Timothy J. 392
Sullivan-Bolyai, John 413
Summers, Max D. 412
Sun's dust rings 277
Suomi, Stephen J. 198
Super Superconducting Collider 118
Supreme Court 38
Survival, Will for 148
Susman, Randall 8
Sussman, Karl 38
Sutcliffe, J. Gregor 212
Sutherland, David E. R. 219
Sweetener, Artificial 134
Sweets 136
Swent, R. L. 374
Swinney, Harry L. 77
Sykes, Lynn R. 404
Symons, T. J. M. 358
Synar, Mike 229
Synchrophasotron 134
Synfuels 104, 329, 353, 362, 393
Szostak, Jack W. 248
Szyba, K. 155
Szybalski, Waclaw 147

T

T-cell leukemia-lymphoma 149
TCDD-contamination chemicals 145, 156
TPA 340
Takahashi, H. 357
Takahashi, Y. 39
Takyu, Choichi 281
Talbot, Alan D. 303
Talbot, Bernard 198
Tallman, John F. 45
Tank window 413
Tanner, Brian K. 6
Tardieu, Christine 9
Tardive dysmentia 214
Taub, Edward 118
Taube, Henry 278
Taylor, Shelley E. 393
Technology award, National 119
Teeth 389
Tejani, Nergesh A. 252
Telescope, Reflecting 75
Telescope, Space 75
Temperature change, Global 260
Teramura, Alan 86
Terao, T. 108
Teraski, Paul I. 218, 357
Termites 260, 412
Testosterone 117
Tevatron 21
Thagard, Norman E. 5
Thalamus 378
Thatcher, Robert 122, 125
Thebe 247
Thematic mapper 100
Thermoelectric generator 126
Thermostats 187
Thinking process, Development of 345
Thinking/Sleep-wake cycle 154
Thomas, Lee 309
Thomas, Lewis 407
Thompson, Gordon 174
Thompson, Kenneth L. 236, 294
Thompson, Richard C. 270
TKHOMPSON, Richard F. 380
Thornton, William E. 165
Throat, Sore 377
Thyroid hormones 74
Tides, California 392
Times Beach, Mo. 156, 377
Tisserat, Brent 28
Tissue plasminogen activator 340
Titan 28, 36
Toads, Spadefoot 293
Tobacco vaccination 377
Tobias, Phillip V. 10, 291
Todd, Edward 417
Toepfer, Alan J. 268
Toksoz, Nafi 293
Tonegawa, Susumu 117
Toole, Jay 372
Toon, Brian 315
Tooth decay 389
Toxic shock syndrome 344
Trachoma 215
Tragedy, Personal 393
Transplant rejection 357
Transplant research, Organ 357
Trapeznikov, Vadim 187
Treado, Steve 126
Tree tissue freezing 28
Tricothecene mycotoxins 270
Tristan 220
Tritium, Radioactive decay of 270
Triton 36
Tropopause folding 151
Troposphere 182
True Basic 404
Truffles 28
Truly, Richard 165
Tsunamis 29
Tube worms 412
Tufts, R. 167
Tulchinsky, Dan 251
Tumor, Hypothalamic 44
Tumor angiogenesis factor 168
Tumor treatment 186
Tunneling, Electron 152
Turco, Richard 315
Turekian, Karl 329
Turnbull, David 85
Turner, Ruth D. 248
Turtles 197
Tuttle, Russell 10
Tuzun, Sadik 377
2-norbornyl cation 106, 259, 275
2,3 butanediol 180
Tyler, G. Leonard 28
Tyrannosaurus 357

U

UNICEF 215
UNK 220
U.S. Synthetic Fuels Corp. 104, 362, 393
Ultrasonic waves 186
Ultrasound 230
Ultrasound devices 375
Ultraviolet-B radiation 86
Ultraviolet light 186, 390
Ulukhan Sulugur 6
Uman, Martin 245
Underwater oxygen extraction 405
Universe, Computer simulations 273, 282
Universe, Inflationary model 20
Universe, Origin of 152
University lobbying 52, 329
Unruh, Karl M. 85
Uranium nucleus 358
Uranus's moons 59
Urea-formaldehyde foam insulation 165
Urokinase 340
Uveitis 118

V

Vaccination, Fetal 198
Vaccinia virus 302
Valium 359
Van Buuren, Willem 218
Van Der Veen, F. 266
Van der Voo, Rob 308
Van Devender, J. Pace 269
Van Horn, Hugh M. 37
Van Hinte, Jan 102
Van Rizen, Joseph 405
Vapor-quench technique 85
Vardy, Michael M. 104
Vascular disease 213
Vasectomy 377
Veatch, Robert M. 328
Veech, Richard L. 180
Vega 100, 116, 324, 406
Velikhov, E. P. 407
Venera 15 & 16 ..... 263, 277, 356
Venezuelan family 408
Venkatesan, Thirumalai N. C. 279
Vents, Ocean floor 24
Venus 28, 213, 263, 277, 356
Venus, Horns of 347, 387
Venus accelerator 134
Venus Radar Mapper 277
Verbeek, Rogier 139
Video display terminals 37, 92
Video games 172
Vietnam veterans 309
Vihko, Reijo 74
Villar, Jose 252
Violence 113, 122, 173, 226
Violence, Domestic 187
Violence, Future 38
Violence, Premartial 187
Virgona, Joseph 363, 364
Vision problems 126
Visscher, Kirk 154
Vitamin C 281
Vitreous State Laboratory 52
Volcanoes
Climate effects 139
Eruptions patterns 312
Hawaiian 17, 24, 392
Io 303
Kilauea 17, 24, 392
Krakatau 129, 138
Loihi 24
Long Valley, Cal. 33, 40, 388
Mammoth Lakes, Cal. 33, 40
Mauna Loa 392
Mt. St. Helens 327
U.S. possible eruptions 135
Venus 213
Volcanic glass blades 93
Volcanic glasses 40
Volcanic island 327
Voles 249
Vom Saal, Frederick S. 326
Von Rosenvinge, Tycho 391
Voss, Gustav-Adolf 221
Voyager 2 215

W

Walder, Leopold V. 148
Waldrep, Kent 245
Walker, Bill 70
Walker, Judith 245
Walker, Michael D. 245
Wallach, Charles 398
Wallenmeyer, William 118
Walsh, William 122, 125, 173
Walters, Harry N. 156
Walther, Fritz 183
Walton, Alan 132
War, Nuclear 305, 306, 314, 371, 407
Warshaw, Joseph B. 250
Waste Isolation Pilot Plant 104
Wastes, Hazardous 29, 135, 232, 235, 245, 249
Wastes, Nuclear 104, 292
Wastewater 234, 313
Water, Drinking
See: Drinking water
Water pollutants, Industrial 119
Water supply 59
Waterbury, John B. 248
Watson, James D. 232
Watt, James 247
Watterson, John 280
Wave forms 180
Waxman, Henry A. 7
Weapons, Laser 85
Weapons, Microwaves 332
Weapons, Space 187
Weapons research 228
Weather forecasting, Short-range 155
Weather satellites
See: Satellites, Weather
Webb, Peter N. 6
Webster, Owen W. 149
Weeds 346
Weevil, Alfalfa 117
Weinberg, Robert A. 154
Weinberger, Daniel 164
Weingartner, Herbert 381
Weisfeldt, Myron 360
Weiss, Scott 249
Weissman, Charles 216
Weitkamp, Lowell R. 5
Wells, Homer 346
Wemmer, Christen 68
Wender, Irving 189
West, Robert M. 197
Westfall, Richard S. 347
Wexler, Alice 410
Wexler, Nancy 311, 408
Wheeler, John 152
White, Byron R. 38
White, David C. 349
White, Simon 283
White, Timothy D. 3, 8
Whyte, Lancelot Law 179
Wigler, Michael 133
Williams, Janet B. W. 170
Williams, Joel L. 310
Wilson, Allan C. 101
Wilson, Ian C. 214
Wilson, James M. 90
Wilson, Jim 286
Wilson, John 348
Winans, Randall 93
Wind turbine 270
Window, Tank 413
Windshear 151
Wine 365
Winer, Eve K. 252
Wing, Steven R. 309
Wisdom, Jack 59
Wise, Sherwood W. Jr. 102
Winter forecast 1983-84 357
Wolfe, Ed 25
Women 119, 161, 170, 393
Woo, Savio L. C. 342
Wood, Spencer 293
World Health Organization 215
Worms, Tube 412
Wozney, John 372
Wrasse, Saddleback 86
Wright, Paul 276
Wu, Junru 313
Wurtman, Richard R. 134
Wyatt, Philip J. 365
Wyles, Jeff S. 101

XYZ

Yager, James D. Jr. 127
Yannoni, Costantino S. 108
Yeast 216
Yellow rain 270
Yoda, Binkoh 281
Yoder, Charles J. 39
Yokoyama, Henry 68
Yoshikawa, Seizo 141
Yost, William T. 230
Young Alvin L. 156
Young, Anne 410
Young, John 246
Young, Robert 406
Yunis, Jorge J. 69
Z^0 particle 71, 190, 195
Zare, Richard N. 168, 186
Zeolite 155
Zeskind, Philip S. 327
Zetler, Bernard 392
Ziegler, Dewey 119
Zimmerman, Herman 231
Zimmerman, Patrick 260
Zsebo, Kris M. 102
Zumpe, Doris 53